controlled by injection of the ganglion. On the sympathetic root side of the question, I believe that, in the treatment of vasomotor manifestations in the nose, attention should be directed not to the secondary neuritis, but to its primary focal etiological factor, be it in tonsils, teeth, sinuses, prostate, or elsewhere. Or if neuritis be not due to focal infection, research should be stimulated to find its cause and not be deadened by a false sense of the problem's being solved by treating a symptom.

GEORGE H. KRESS, M. D. (245 Bradbury Building, Los Angeles)—The spheno-palatine ganglion and nerves are intricate, not only in their anatomy and physiology, but likewise in their pathology. The large number of symptoms enumerated by the essayist in conditions where Meckel's ganglion is involved may be taken as a good indication of this. These symptoms, many of them, are so distressing that the patient is willing to try almost anything for relief, and there can be but little doubt, from the researches of Sluder and others, that very excellent results are not infrequently obtained through the injection of the pheno-alcohol, after the Sluder method, and as advocated by the essayist.

I am inclined to think, however, that the use of some of the milder procedures which Sluder and others have tried out, such as placing local applications to the mucous membrane over the ganglion are worth a preliminary try-out before resorting to the alcohol injection.

At times the response to such local applications and packs, with say 10 per cent argyrol and other solutions, is very gratifying and seemingly quite as effective as the alcohol injections, without any of the danger or distress that is sometimes incident to the use of an alcohol injection.

Gundrum covers the whole subject matter in very excellent form, and his presentation of the underlying anatomical and surgical principles and his case reports will no doubt lead us all to keep this type of procedure more in mind when nasal disturbances that are related or dependent upon derangement of Meckel's ganglion come to our personal attention.

DOCTOR GUNDRUM (closing)—The anatomical description has been taken solely from Quains' Anatomy, Vol. III, Part II, and is in no way original.

It is not at all difficult to see a small area of intense redness on the mucous membrane over the spheno-palatine foramen if one is accustomed to making post-nasal examinations with a good light. I recently saw a patient that Sluder had injected ten years previous. Up to the present time her symptoms have not returned.

Most of the patients that I have injected for "hay-fever," asthma and vasomotor rhinitis have had sensitization tests. One woman had had four hundred tests. Many have had all of their sinuses opened, teeth extracted, tonsils removed, and the symptoms still persisted.

Before considering injection I examine carefully for a focus of infection. I have seen several patients with an infected sphenoid whose symptoms would disappear temporarily by cocainization of the nasal ganglion. In some cases the symptoms were relieved completely by opening the sphenoid. In one case the sphenoid drained freely, but the pain persisted. Injection of the nasal ganglion stopped all symptoms.

"Medical people and hygienists must always have some curative or preventive which they laud without sense or reason," says the Medical Journal and Record editorially. "Of late it was vitamines which were given undue recognizance, and at present light is in the limelight. Always it is some condition the importance of which was known to our lower (?) animal friends for ages, and neglected by man only, which is now hailed as a lost and only factor for health."

"Possibly one may be dogmatic about an abstract scientific conclusion, but human variability makes dogmatism with reference to human beings a difficult, unsafe, and unscientific procedure."—(Ed. Am. Med.)

About the only way for a king to get on the first page now is to be dead four thousand years.—Publishers Syndicate.

THE ROLE OF CESAREAN SECTION IN THE TREATMENT OF ECLAMPSIA

By JOHN C. IRWIN,* M. D., *Los Angeles*

The literature on Cesarean section in eclampsia is voluminous, but consists principally of reports on a few cases, generally less than five. Very few authorities have had a large series of personal cases. The British symposium of 1922 is the most comprehensive.

Statistics on mortality following the operation vary from 9.5 to 60 per cent in series of ten or more cases.

The mortality rate following Cesarean section is very unfavorable when compared to that of the so-called conservative treatment.

Cesarean section has a very limited field in the treatment of eclampsia. It is probably indicated only in the case of well advanced pregnancy, with the absence of cervical dilatation and previous attempts at delivery in which there has been no improvement after a few hours of sedation and elimination treatment. It is indicated, of course, in co-existing abnormalities, such as contracted pelvis.

The operation probably has a larger field of usefulness in the case of pre-eclamptic toxemia, in whom toxic symptoms increase in spite of elimination and other medical treatment.

The abdominal hysterotomy should be used, when indicated, in cases at or very near term, and the vaginal hysterotomy in the cases before the seventh month of gestation. The low cervical operation is hardly indicated because it is not applicable in cases before labor is well advanced, and Cesarean section is not indicated in the eclamptic well advanced in labor, unless there is pelvic contraction, or other co-existing indication.

In the series of 118 eclampsias reported here, the mortality rates correspond fairly well with the other larger series. Twenty-one Cesarean sections, with a mortality rate of 43 per cent, is unfavorable for the operation.

Conservative methods of treatment, particularly the Dublin and Stroganoff methods, offer the best results so far reported.

The new treatment of eclampsia with magnesium sulphate intravenously is very promising, and the staffs of the three hospitals, herein mentioned, are enthusiastic about the results obtained, both in eclampsia and toxemia of pregnancy.

DISCUSSION *by E. M. Lazard, Los Angeles; John Vruwink, Los Angeles.*

DURING the past thirty years the idea has quite generally prevailed that since gestation is the cause of toxemia, immediate termination of pregnancy is desirable if eclampsia cases are to be treated successfully. Halbertsma first suggested Cesarean section for certain cases of eclampsia in 1889, and Duhrssen in the early nineties proposed the vaginal hysterotomy for the same condition. This idea is still held by some obstetricians of large experience. Some, however, have always contended that only the more conservative methods of termination of pregnancy should be employed. I believe this contention is now supported by an increasing percentage of authorities as more experience is gained and more statistics are available.

During the past twenty-five years Cesarean section has been used very extensively, both in this country and abroad. Its popularity has probably been due partly to the fact that this method is more

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spectacular, and is easier and quicker than are the conservative methods. Its use is more prevalent among general surgeons than among obstetricians both on account of their surgical training and their lack of appreciation of the danger of eclampsia; they are called upon rarely to deal with this most dangerous complication of pregnancy. The obstetrician, on the other hand, is coming in contact with eclampsia frequently, and realizes more fully that he has to deal with a condition that is as much medical as surgical, if not more so.

Review of the literature reveals surprisingly few large series of cases operated upon by any one surgeon. In at least 90 per cent of the cases the reports are of less than five cases, and generally of only one or two. Each individual has had all too few personal cases to enable him to form an authoritative opinion on the merits of the procedure. This situation is in direct contrast to that of the many surgeons who can report one or two hundred gallbladder or appendix operations, and are entitled to an opinion based on wide personal experience. Since collective medicine exceeds in value the ideas of the individual, one must add to a personal study of cases a review of the literature available, in order to draw any conclusions on the subject. This I have attempted in this paper.

The first report of a large series of cases was made in 1914 by R. Peterson, who listed 500 Cesareans in eclampsia by 259 different operators. His cases are divided chronologically into 198 cases operated before 1908, and 283 cases operated in the five- year period from 1908 to 1913, and show a mortality rate of 48 per cent and 26 per cent, respectively, and a total mortality rate of 35 per cent for the 500 cases. He selects certain groups of cases to prove his contention that there is a considerable field for the operation. In one group of ninety-one operations performed by thirteen men, having five or more cases to their credit, the mortality was only 18.68 per cent. If we deduct 15 cases where the proportion of moribund and septic cases was very high, the remaining 76 cases gave a mortality of 13.15 per cent. In another group of 60 cases where the operation was performed after one to five convulsions and after only one or two vaginal examinations had been made, and no attempt had been made to deliver from below, the mortality was 15 per cent. In his series, 84 per cent were primagravida and 16 per cent multigravida; the primagravida probably presented undilated and rigid cervix and soft parts, which more often called for the abdominal section. Peterson argued that the operation had not been given a fair trial, as it was performed soon after the first convulsion, and said that the method could no longer be disregarded by obstetricians, who had based their opposition to the procedure upon altogether too high mortality statistics.

A series of 14 cases with 14 per cent mortality reported by B. C. Hirst; another of 174 collected cases with 16.1 per cent mortality reported by Brodhead, and a third of 21 cases with 9.5 per cent mortality by Park, all sound complimentary to the procedure. But when one reads a recent report by Ingraham of 19 collected cases from the hospitals of Denver with a mortality of 57.9 per cent, one has to consider very seriously the advisability of its use.

The most comprehensive report with the largest series of cases published in recent years was the one made in a symposium before the British Congress of Obstetrics and Gynecology on June 29, 1922. This report details the investigation of 2005 cases of eclampsia occurring in the British Isles from 1911 to 1921. The gross mortality of the series was 22.5 per cent. Eden, at this symposium, calculated that about 600 women die of eclampsia annually in the British Isles. If this represents the gross mortality of the disease, then there are about 2600 cases of eclampsia in the British Isles annually among a population of 47,157,749, with an incidence of one case of eclampsia in every 380 births.

As the results of treatment depend upon the severity of the case, the British were led to the conclusion that the following seven phenomena are signs of danger: coma, a pulse rate over 120, a temperature above 103 degrees, a number of fits greater than ten, a urine which becomes solid on boiling, the absence of edema, and a blood pressure over 200. If a patient exhibited any two of the above phenomena, the case was listed as "severe"; if not, the case was listed as "mild." Four hundred and twenty-five patients who had been delivered, with various percentages of mortality, were grouped under this classification, as indicated in the following table:

	"Mild"		"Severe"		Total	
	Cases	Mortality	Cases	Mortality	Cases	Mortality
Normal delivery	50	6.0%	39	20.5%	89	12.3%
Induction of labor	59	5.1%	24	20.8%	83	9.6%
Assisted labor	100	5.0%	51	33.3%	151	14.5%
Cesarean section	51	9.8%	37	43.2%	88	23.8%
Accouchement forcé	4	25.0%	10	60.0%	14	50.0%

Attention to these statistics shows that accouchement forcé is not to be considered in delivery, that in the mild cases Cesarean section doubles the mortality, and that in severe cases it increases the mortality by more than a third. This report shows that foetal mortality is considerably lower in Cesarean section than in all other methods of delivery excepting normal delivery, with which it compares very favorably.

A recent study by Wilson of the eclampsia cases treated at Johns Hopkins Hospital is very enlightening. His series is divided chronologically into 110 cases treated from 1894 to 1912, and 137 cases treated from 1912 to 1924. The first group was treated by immediate delivery by various methods, which included many major obstetrical operations, while the second group was treated conservatively. His report shows that the maternal mortality in mild cases has been reduced from 14.2 to 2.3 per cent, and that in severe cases from 38.8 to 19.4 per cent by use of conservative methods.

Solomon's report of treatment by the Dublin method shows a mortality of 10.29 per cent in 204 cases treated in Rotunda from 1903 to 1922. A compilation of 343 cases treated by a certain number of obstetricians using the Stroganof and other expectant forms of treatment shows a mortality rate of 12 per cent, while another series of 2208 cases treated by the Stroganof methods gives 9.8 per cent. Stroganof in 230 personal cases had a mortality of

TABLE NO. 1

ECLAMPSIAS

Ante-partum and Intra-partum Cases	At L. A. Gen. Hospital			At Private Hospitals			Total of Series		
	Cases	Died	Mort. %	Cases	Died	Mort. %	Cases	Died	Mort. % for Method
Delivered by Cesarean section	15	7	47	6	2	33	21	9	43
Delivered by accouchement forcé	9	4	44	3	0	0	12	4	33
Delivered spontaneously or by less radical means	41	12	29	9	2	20	50	14	15
Not delivered (moribund)	8	6	75	1	1	100	9	7	77
Post-partum cases	18	4	22	8	0	0	26	4	15 for P. P. cases
Totals	91	33	36	27	5	18	118	38	32 for series

1.7 per cent, but his series may have included also pre-eclamptic toxemias.

These mortality rates, when compared with those reported from various forms of operations, discourage one in the use of any of the major operative procedures.

I have reviewed the records of the Los Angeles General Hospital and the Methodist Hospital of Southern California for a period covering the past five years, and those of the new Hollywood Hospital covering a period of ten months. I have also included four personal cases treated in other private hospitals during the past five years. I am indebted to the obstetrical staffs of these institutions for allowing me to use their case records for this report.

The series includes 118 eclampsias and 80 pre-eclamptic toxemias. At the Los Angeles General Hospital were 91 eclampsias and 34 toxemias, and in the private hospitals 27 eclampsias and 46 toxemias. The eclampsias include only those patients who had convulsions. I believe that many of the toxemia cases might have been classified as eclampsias, but since there must be an arbitrary division, the presence or absence of convulsions should determine the classification of a case.

It is very evident, and I think significant, that the majority of private patients are brought to the hospital for treatment before reaching the eclampsia stage, or while still pre-eclamptic toxemias. On the other hand, the charity cases, having little or no medical supervision, are well advanced in their toxemia or are eclampsias on admission.

I have not classified these cases as "mild" or "severe" according to the English classification. As a member of the obstetrical staff at the Los Angeles General Hospital, I have observed a considerable number of the cases here reported, and I am sure that three-fourths of them exhibited two of the seven danger symptoms, and can be classed as "severe." It will be seen that the mortality rate of 36 per cent for the General Hospital is quite high, compared with one of 18 per cent in the private hospitals. This obtains, I am sure, because the charity cases come from all over Los Angeles County, and are "severe" as a result of gross neglect of the poorer classes in seeking prenatal care. A large percentage of the General Hospital eclampsias have been under the care of midwives. Many of them are admitted after several hours of coma or convulsions and, in many, attempts at delivery have been made at home before sending the patient to the hospital. The charity cases are much more severe than the cases from private hospitals.

In this series of 118 eclampsias, Cesarean section has been performed in twenty-one cases, or in one out of every six cases treated. The ratio is about one in four and a half in private cases, and one in six in charity cases, showing that it has been used less frequently in the more severe group.

Table No. 1 shows the number of cases treated by Cesarean section, accouchement forcé, spontaneous and assisted delivery, including induction of labor, forceps, breech and simple version. The mortality rate for each form of treatment is shown, and is the significant point of this table.

While the series is small compared with Peterson's, Brodhead's, and the British report, the mortality rate is quite constant. The rate for accouchement forcé is a bit low, but that is probably because of the small number of cases delivered by this method.

Of the nine cases not delivered, two who were treated with magnesium sulphate were allowed to go home to await labor, but were kept under careful supervision. Of the seven who succumbed a few hours after admission, one in a private hospital refused Cesarean section at the eighth month, and the others at the General Hospital were considered in too serious a condition to be subjected to operative delivery. Most of these were at the eighth month of pregnancy.

The question naturally arises, "Were not the Cesarean cases more severe than those who were delivered by other methods?" Table No. 2 will partially answer this question by giving the number of cases with percentages of total where such data was available in the records. The records of the Cesarean cases are more complete than those of the non-Cesarean ones, and this will account for some of the differences in percentages. In the moribund cases, who died soon after admission, most of the charts showed no record of urinalysis, blood pressure, and number of convulsions. About the same percentage were comatose or unconscious on admission. In fact, only .9 per cent of the Cesarean section cases were in coma, whereas 16 per cent of the non-Cesareans were. After studying the charts of the cases and seeing a large number of the ones at the General Hospital, I believe they are of about equal severity.

The Cesarean sections at the General Hospital were not done after delivery from below had been attempted, or on patients where infection was prob-

TABLE NO. 2

ANTE-PARTUM AND INTRA-PARTUM CASES OF ECLAMPSIA

	Cesareans—21		Non-Cesareans—71	
	Cases	Pct.	Cases	Pct.
No. who had 6 or more convulsions	10	47	10	14
No. who had 10 or more convulsions	5	24	4	5
No. who had Bl. P. of 170 or more	10	47	21	29
No. who had Bl. P. of 200 or more	5	24	10	14
No. unconscious or in coma on admission	7	33	22	31
No. who had albumen in urine	18	85	42	59
No. who had casts in urine	12	57	28	39

ably present. The same contra-indications were probably considered in the private cases.

The mortality rate of 43 per cent in Cesarean section cases certainly does not compare very favorably with the rate of 28.8 per cent in cases treated by all other methods, including moribund cases. Four of the Cesareans in private hospitals with one death, and four of those at the General Hospital with one death, were operated by the writer—a mortality of 25 per cent in eight cases by one operator. The other thirteen cases were operated by seven different surgeons, two doing three operations each; two performing two each, and the other three one each.

In 80 cases of pre-eclamptic toxemia, 18 were delivered by Cesarean section, with two deaths, a maternal mortality of 11 per cent. The total number of deaths in the 80 cases was 5, or 6.2 per cent. Six of the 18 Cesarean sections in the toxemias were performed by the essayist with no mortality. These cases, and probably most of the others, were operated after being on elimination treatment and sedation with increasing toxic symptoms, in spite of treatment. Some of the other cases I saw in consultation and advised Cesarean section because of their failure to respond to treatment.

Much more data is available on this series of cases, but it has no direct bearing upon our subject.

I do want to digress, however, to mention a form of treatment we have been using for the past year at the Los Angeles General Hospital on all eclamptic and pre-eclamptic toxemias. This treatment was outlined, and seventeen cases were reported in detail by E. M. Lazard in an article published in the February number of the American Journal of Obstetrics and Gynecology. The treatment was suggested by Emil Bogan (an intern) and consists of the use of magnesium sulphate intravenously. To date, 32 cases of eclampsia with 7 deaths have been so treated. This is a gross mortality of 22 per cent. Of the seven deaths, one patient died twenty-three days, after delivery, of sepsis and a pelvic abscess after entirely recovering from her eclampsia. A second was admitted nine days post-partum in coma, and died three hours after admission, probably of nephritis. Another died thirteen hours after admission of acute cardiac dilatation immediately following a dose of veratrum viride, which caused a fall in blood pressure from 210/140 to 96/68; and a fourth died twelve hours after admission, having been in coma fifteen hours before admission.

Deducting the one case as a nephritis and not an eclampsia, and another death as due to sepsis, we have 16.1 per cent mortality in cases which were evenly divided as to "mild" and "severe" in type. If one deducts the other two cases who were hopeless, we have 29 cases with 3 deaths, or a mortality of 10.3 per cent in cases in which there was some chance for recovery.

The technique in use now is to give 20 cc. of 10 per cent magnesium sulphate intravenously about every four to six hours and a saline cathartic, or simple enema. The theory of this treatment is that the convulsions and restlessness of eclampsia are due to edema of the brain. The magnesium sulphate, acting as a diuretic, removes this edema; as a sedative, it quiets the restlessness.

Five cases of severe toxemia have been treated, with resultant lowering of blood pressure, disappearance of edema, and general improvement. The diuretic effect is very evident. A private toxemia case of mine with blood pressure of 164/100, edema, and severe headache in beginning labor was given six doses in all. She voided 1700 cc. of urine in the first twelve hours, and her edema and headache disappeared before she completed her first stage; the blood pressure was below 130 throughout her lying-in period. Another post-partum eclampsia with one fit voided 2000 cc. of urine in the first twelve hours after the fit, her edema and headache disappeared in twenty-four hours, and the blood pressure remained normal after forty-eight hours. None of these patients has been given any other kind of treatment, and they are left as quiet and undisturbed as possible. No Cesarean sections have been performed for eclampsia at the General Hospital since the use of this treatment has been adopted.

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DISCUSSION

E. M. LAZARD, M. D. (2007 Wilshire Boulevard, Los Angeles)—Doctor Irwin's review of the reports from the various clinics, as well as from the Los Angeles General Hospital, shows conclusively, I believe, that Cesarean section as a treatment *per se*, of eclampsia, should be discarded. While some of the more prominent clinics report small series of cases with mortality rates varying from 9.5 to 16.1 per cent, yet when collective reports from various hospitals present mortality rates as high as 57.9 per cent, it would seem that the procedure in the hands of the average surgeon presents an almost prohibitive mortality. If, "in mild cases Cesarean section doubles the mortality, and in severe cases it increases the mortality more than a third," one is led to speculate as to whether the cases which recovered would not have recovered under more conservative treatment, and there is little doubt that the mortality would have been greatly reduced.

The results where the operation is performed for the pre-eclamptic toxemia are far better.

Since the beginning of our work with the intravenous use of magnesium sulphate in eclampsia, there has been no section done for a toxemia in the Los Angeles General Hospital. Our experience has convinced me that section in the active eclamptic is absolutely contra-indicated; and in the pre-eclamptic, or the patient who has been carried past the eclamptic crisis by medical treatment, it is only indicated where the obstetrical conditions are such as to indicate its performance, irrespective of the toxemic condition. It is true that this does not take into consideration the interests of the baby, but as these babies are frequently premature and always more or less toxic, it is a question whether the ultimate results to the babies is

any worse in the medical treatment. In this connection I am reminded of Olshausen and Veit's dictum in regard to the treatment of placenta previa. They say, "He who pays least attention to the welfare of the baby will have the happiest results in treatment of placenta previa; he will not lose an appreciably greater number of children, and will achieve results for the mother which otherwise would not be possible." This, I believe, applies with equal force to the eclamptic, so that in view of the statistics available, I believe that section has no place as a treatment, *per se,* of toxemia, either pre-eclamptic or eclamptic. It has, however, I believe, a definite, though very limited, field in the pre-eclamptic where local obstetrical conditions are such as to indicate its performance.

JOHN VRUWINK, M. D. (Pacific Mutual Building, Los Angeles)—The resumé presented by Doctor Irwin is both enlightening and disconcerting. It emphasizes the need of search for a more conservative procedure in the care of the eclamptic. It emphasizes the reason for the conservative measures advocated by the writers of current literature. It emphasizes, too, the dangerous human characteristic of jumping at conclusions. Irwin states that most series are of but few cases, far too few, for any one individual to arrive at a logical conclusion. The study is most valuable, therefore, for it presents a phase of obstetrical surgery, prompted by a misconception of etiology, which upon investigation has given consistently poor results.

The patient with convulsions is a poor surgical risk; that is proved. The patient still in the pre-eclamptic stage is a better risk. The obvious conclusion is that all patients should receive adequate care to prevent the onset of convulsions.

There is no uniform standard treatment, but there is a persistent effort to find some conservative measure to better the discouraging results of surgery. Irwin shows with rather startling definiteness what may be expected from Cesarean section.

Conservative measures give much promise and each has zealous advocates, but all are still viewed with more or less suspicion. This skepticism still obtains, regarding magnesium sulphate intravenously. The habit of care, for years, has been too much treatment. It is difficult to merely give intravenous injections of magnesium sulphate with only the mildest kind of elimination. We feel, however, that it will usually prevent and stop convulsions and that the condition of the patient is fortified so that she is better prepared for interference when interference is necessary.

It is not difficult to agree with Irwin that section has no place in the care of eclampsia. I still believe that section has a definite field of usefulness in the care of the pre-eclamptic, but only when preceded by intravenous magnesium sulphate, and in the eclamptic who has been carried over the period of convulsions, preferably by magnesium sulphate, when the patient again presents signs of an approaching eclampsia. Conservative measures will give better results, not only for mothers, but for the babies as well.

The physician's occupation has become probably the world's greatest profession; great in the number of persons devoting their lives to it; great in their intellectual attainments, high character, and the respect and admiration in which the world holds them; great in the priceless knowledge, skill and services supplied by them to relieve the suffering and sorrow of men, women and children; great in their diligence and progress in acquiring new knowledge and more skill; great in the supremacy which they have attained, and are still extending over destructive diseases; and great in their power to insure health and happiness to all mankind.

The physician is the only agency actively devoted to studying, preventing and eradicating disease, and is the chief subject for consideration by the state in making provisions for protecting the public health."—H. E. Kelly of the Chicago Bar.)

There can't be a revolution in America. Not enough people are mad about the same thing.—Birmingham News.

INDUSTRIAL HERNIA VERSUS SEMINAL VESICULITIS AND VASITIS

By MILEY B. WESSON,* M. D., *San Francisco*

Hernia is practically always due to the presence of a preformed pouch of peritoneum which follows the testis in its descent into the scrotum and has failed to close in the normal way; it is never the result of a single strain, but is the cumulative effect of a number of strains spread over a considerable period of time. The onset is gradual and is practically never accompanied by pain.

Careful surgeons may disagree as to the presence of a bubonocele, but never as to its etiology.

Practically one-third of all men have preformed hernial sacs, and merely because of a pain in the groin these should not be subjected to surgery, particularly if the prostate and seminal vesicles are pathological.

Hernia developing in the course of duty is a disease and not an injury.

Pain in the groin subsequent to a strain, is generally due to vasitis.

Epididymitis and vasitis follow a strain only when the seminal vesicles and prostate are infected.

The repair of a relaxed inguinal ring will not relieve pain due to a tender, inflamed spermatic cord.

A herniotomy in the presence of an acute vasitis is pregnant with dangers to the future virility of the testis.

Blood-stained ejaculation is pathognomonic of seminal vesiculitis, and does not occur with trauma or rupture.

Prostatitis and seminal vesiculitis are very common and occur secondarily to nonvenereal, as well as venereal infections.

Pus, without organisms in the urine, commonly indicates either tuberculosis of the kidney or a prostatitis.

Seminal vesiculitis, because of its symptoms, is commonly confused with hernia, appendicitis, sacro-iliac diseases, spondylitis, and sciatica.

The study is based on forty-seven cases of vasitis, most of which had been diagnosed as industrial hernia and operations advised. Twelve cases, representing the various types, are reported in brief.

DISCUSSION *by Emmet Rixford, San Francisco, Robert V. Day, Los Angeles; F. S. Dillingham, Los Angeles; H. A. Rosenkranz, Los Angeles.*

INTRODUCTION

THE development of modern industry with men employed by the thousands, and the passage of compensation laws in the various states has raised the question of the cause of hernia, of the relative importance of congenital defects, trauma and occupation as factors, and the possible lesions that cause erroneous diagnoses of hernia.

According to careful post-mortem examinations, about one-third of all men are born with a potential hernia, and many of these acquire a seminal vesiculitis. Following a strain there is a flare-up of the infection, which manifests itself as a vasitis. The first subjective symptom is a pain in the groin, which the patient too often attempts to "sell" to the insurance company as an industrial hernia. Because of the chaotic condition of the hernia problem, as indicated by the tendency of the Industrial Accident Commissions to impose upon corporations as a legal liability the responsibility for hernia, it behooves us to curb our tendency to classify as an in-

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